

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/359,300

DATE: 10/19/2000

TIME: 12:02:21

Input Set : A:\PTO.txt

Output Set: N:\CRF3\10192000\I359300.raw

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OCT 23 2000

TECH CENTER 1600/2900

4 <110> APPLICANT: KUMAGAI, Monto H.
 5 DELLA-CIOPPA, Guy R.
 6 ERWIN, Robert L.
 7 McGEE, David R.
 9 <120> TITLE OF INVENTION: METHOD OF DETERMINING THE PRESENCE OF A
 10 TRAIT IN A PLANT BY TRANSFECTING A NUCLEIC ACID SEQUENCE OF
 11 A NON-PLANT DONOR INTO A HOST PLANT IN A POSITIVE
 12 ORIENTATION
 14 <130> FILE REFERENCE: 008010137US07
 16 <140> CURRENT APPLICATION NUMBER: 09/359,300
 17 <141> CURRENT FILING DATE: 1999-07-21
 19 <160> NUMBER OF SEQ ID NOS: 60
 21 <170> SOFTWARE: FastSEQ for Windows Version 3.0
 23 <210> SEQ ID NO: 1
 24 <211> LENGTH: 26
 25 <212> TYPE: DNA
 26 <213> ORGANISM: Tomato mosaic virus
 28 <400> SEQUENCE: 1
 29 ctcgcaagt ttgaaccaa atcctc
 31 <210> SEQ ID NO: 2
 32 <211> LENGTH: 35
 33 <212> TYPE: DNA
 34 <213> ORGANISM: Tomato mosaic virus
 36 <400> SEQUENCE: 2
 37 cgggggtacct gggccccaac cgggggttcc ggggg
 39 <210> SEQ ID NO: 3
 40 <211> LENGTH: 41
 41 <212> TYPE: DNA
 42 <213> ORGANISM: Tomato mosaic virus
 44 <400> SEQUENCE: 3
 45 tctctgagcc taggctcgca aagtttcgaa ccaaatcctc a
 47 <210> SEQ ID NO: 4
 48 <211> LENGTH: 35
 49 <212> TYPE: DNA
 50 <213> ORGANISM: Tomato mosaic virus
 52 <400> SEQUENCE: 4
 53 cgggggtacct gggccccaac cgggggttcc ggggg
 55 <210> SEQ ID NO: 5
 56 <211> LENGTH: 24
 57 <212> TYPE: DNA
 58 <213> ORGANISM: Tomato mosaic virus
 60 <400> SEQUENCE: 5
 61 tatgtatggt gcagaagaac agat
 63 <210> SEQ ID NO: 6
 64 <211> LENGTH: 24
 65 <212> TYPE: DNA
 66 <213> ORGANISM: Tomato mosaic virus

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68 <400> SEQUENCE: 6
69 agtcgactct tcctcttctg gcat 24
71 <210> SEQ ID NO: 7
72 <211> LENGTH: 30
73 <212> TYPE: DNA
74 <213> ORGANISM: Tomato mosaic virus
76 <400> SEQUENCE: 7
77 tgctcgagtg tgctcttcag tttctgtca 30
79 <210> SEQ ID NO: 8
80 <211> LENGTH: 30
81 <212> TYPE: DNA
82 <213> ORGANISM: Tomato mosaic virus
84 <400> SEQUENCE: 8
85 aactcgagcg ctttgatttc tccgaagctt 30
87 <210> SEQ ID NO: 9
88 <211> LENGTH: 114
89 <212> TYPE: DNA
90 <213> ORGANISM: Tomato mosaic virus
92 <220> FEATURE:
93 <221> NAME/KEY: CDS
94 <222> LOCATION: (28)...(114)
96 <400> SEQUENCE: 9
97 gttttaaata cgctcgaggt tttaaat atg tct gtt gcc ttg tta tgg gtt gtt 54
98 Met Ser Val Ala Leu Trp Val Val
99 1 5
101 tct cct tgt gac gtc tca aat ggg aca agt ttc atg gaa tca gtc cgg 102
102 Ser Pro Cys Asp Val Ser Asn Gly Thr Ser Phe Met Glu Ser Val Arg
103 10 15 20 25
105 gag gga aac cgt 114
106 Glu Gly Asn Arg
110 <210> SEQ ID NO: 10
111 <211> LENGTH: 29
112 <212> TYPE: PRT
113 <213> ORGANISM: Tomato mosaic virus
115 <400> SEQUENCE: 10
116 Met Ser Val Ala Leu Trp Val Val Ser Pro Cys Asp Val Ser Asn
117 1 5 10 15
118 Gly Thr Ser Phe Met Glu Ser Val Arg Glu Gly Asn Arg
119 20 25
121 <210> SEQ ID NO: 11
122 <211> LENGTH: 39
123 <212> TYPE: DNA
124 <213> ORGANISM: Nicotiana benthamiana
126 <400> SEQUENCE: 11
127 gcctcgagtg cagcatggaa acccttctaa agcttttcc 39
129 <210> SEQ ID NO: 12
130 <211> LENGTH: 36
131 <212> TYPE: DNA
132 <213> ORGANISM: Nicotiana benthamiana

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134 <400> SEQUENCE: 12
135 tccctaggctc aaaggctctc tattgctaga ttgccc 36
137 <210> SEQ ID NO: 13
138 <211> LENGTH: 111
139 <212> TYPE: DNA
140 <213> ORGANISM: Tobacco mosaic virus
142 <220> FEATURE:
143 <221> NAME/KEY: CDS
144 <222> LOCATION: (25)...(111)
146 <400> SEQUENCE: 13
147 gttttaaata cgctcgagtgc cagc atg gaa acc ctt cta aag cct ttt cca 51
148 Met Glu Thr Leu Leu Lys Pro Phe Pro
149 1 5
151 tct cct tta ctt tcc att cct act cct aac atg tat agt ttc aaa cac 99
152 Ser Pro Leu Leu Ser Ile Pro Thr Pro Asn Met Tyr Ser Phe Lys His
153 10 15 20 25
155 aac ttc act ttt 111
156 Asn Phe Thr Phe
160 <210> SEQ ID NO: 14
161 <211> LENGTH: 29
162 <212> TYPE: PRT
163 <213> ORGANISM: Tobacco mosaic virus
165 <400> SEQUENCE: 14
166 Met Glu Thr Leu Leu Lys Pro Phe Pro Ser Pro Leu Leu Ser Ile Pro
167 1 5 10 15
168 Thr Pro Asn Met Tyr Ser Phe Lys His Asn Phe Thr Phe
169 20 25
171 <210> SEQ ID NO: 15
172 <211> LENGTH: 44
173 <212> TYPE: DNA
174 <213> ORGANISM: Erwinia herbicola
176 <400> SEQUENCE: 15
177 ccaagcttct cgagtgcagc atgcagcaac cgccgctgct tgac 44
179 <210> SEQ ID NO: 16
180 <211> LENGTH: 43
181 <212> TYPE: DNA
182 <213> ORGANISM: Erwinia herbicola
184 <400> SEQUENCE: 16
185 aagatctctc gagctaaacg ggacgctgcc aaagaccggc cgc 43
187 <210> SEQ ID NO: 17
188 <211> LENGTH: 23
189 <212> TYPE: DNA
190 <213> ORGANISM: Tobacco mild green mosaic virus
192 <400> SEQUENCE: 17
193 tgtgaaactc gaaaagggttc cgg 23
195 <210> SEQ ID NO: 18
196 <211> LENGTH: 36
197 <212> TYPE: DNA
198 <213> ORGANISM: Tobacco mild green mosaic virus

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200 <400> SEQUENCE: 18
201 cgggggtacct gggccgctac cggcggttag gggagg          36
203 <210> SEQ ID NO: 19
204 <211> LENGTH: 31
205 <212> TYPE: DNA
206 <213> ORGANISM: Ribgrass mosaic virus
208 <400> SEQUENCE: 19
209 tactcgaggt tcataagacc gcggtaggcg g          31
211 <210> SEQ ID NO: 20
212 <211> LENGTH: 36
213 <212> TYPE: DNA
214 <213> ORGANISM: Ribgrass mosaic virus
216 <400> SEQUENCE: 20
217 cgggggtacct gggccctac ccggggttta gggagg          36
219 <210> SEQ ID NO: 21
220 <211> LENGTH: 107
221 <212> TYPE: DNA
222 <213> ORGANISM: N. tabacum
224 <220> FEATURE:
225 <221> NAME/KEY: CDS
226 <222> LOCATION: (21)...(107)
228 <400> SEQUENCE: 21
229 gttttaaata cgtcgagcc atg gct tcc tca gtt ctt tcc tct gca gca gtt          53
230                               Met Ala Ser Ser Val Leu Ser Ser Ala Ala Val
231                               1           5           10
233 gcc acc cgc agc aat gtt gct caa gct aac atg gtt gca cct ttc act          101
234 Ala Thr Arg Ser Asn Val Ala Gln Ala Asn Met Val Ala Pro Phe Thr
235           15           20           25
237 ggc ctt          107
238 Gly Leu
242 <210> SEQ ID NO: 22
243 <211> LENGTH: 29
244 <212> TYPE: PRT
245 <213> ORGANISM: N. tabacum
247 <400> SEQUENCE: 22
248 Met Ala Ser Ser Val Leu Ser Ser Ala Ala Val Ala Thr Arg Ser Asn
249 1           5           10           15
250 Val Ala Gln Ala Asn Met Val Ala Pro Phe Thr Gly Leu
251           20           25
253 <210> SEQ ID NO: 23
254 <211> LENGTH: 1543
255 <212> TYPE: DNA
256 <213> ORGANISM: Tobacco mild green mosaic virus
258 <400> SEQUENCE: 23
259 ctcgagggttc ataagaccgc ggtaggcgga gcgtttgttt actgtagtat aattaaatat          60
260 ttgtcagata aaaggttggt taaagatttg tttttgttt gactgagtcg ataattgtctt          120
261 acgagcctaa agtttagtgac ttccttgctc ttacgaaaaa ggaggaaatt ttaccaagg          180
262 ctttgacgag attaaagact gtctctatta gtactaagga tggtatatct gttaaggagt          240
263 ctgagtcctt gtgtgatatt gatttggttag tgaatgtgcc attagataag tataggtatg          300

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264 tgggtgtttt ggggtgttgt ttcaccgggt aatggctggt accggatttc gttaaagggt 360
265 gggtaacagt gagcgtgatt gacaaaacgc ttgaaaattc cagagagtgc ataattggta 420
266 cgtaccgagc tgctgtaaaag gacagaaggt tccagttcaa gctggttcca aattacttcg 480
267 tatccattgc ggaatgccaag cgaaaaccgt ggcagggtca tgtgcgaatt caaaatctga 540
268 agatcgaagc tggatggcaa cctctagctc tagagggtgt ttctgttgcc atggttacta 600
269 ataacgtggt tgtaaagggt ttgagggaaa aggtcatcgc agtgaatgat ccgaacgtcg 660
270 aaggtttcga aggtgtggtt gacgatttcg tcgattcggg tgcgtcattc aaggcgattg 720
271 acagtttcgc aaagaaaaag aaaaagattg gaggaaggga tgtaaataat aataagtata 780
272 gatatagacc ggagagatac gccggtcctg attcggtaca atataaagaa gaaaatggtt 840
273 tacaacatca cgagctcgaa tcagtaccag tatttcgcag cgaatgtggc agagcccaca 900
274 gcgagtctta accagtgctg gtctgcgttg tcgcaatcgt atcaaaactc ggcggcaaga 960
275 gatactgtta gacagcagtt ctctaaccct ctgagtgcga ttgtgacacc gaaccagcgg 1020
276 tttccagaaa caggataacc ggtgtatatt aattcagcag ttctaaaacc gttgtacgag 1080
277 tctctcatga agtcctttga tactagaaat aggatcattg aaactgaaga agagtgcgct 1140
278 ccatcggttt ccgaagtatc taatgcaaca caacgtgttg atgatgcgac cgtggccatc 1200
279 aggagtcaaa ttcatgtttt gctgaacgag ctctccaacg gacatggtct gatgaacagg 1260
280 gcagagtctc aggttttatt accttgggct actgcgccag ctacataggc gtggtgcaca 1320
281 cgatagtcca tagtgttttt ctctccactt aaatcgaaga gatatactta cgggttaatt 1380
282 ccgcaagggt ggcgtaaacc aaattacgca atgttttagg ttccatttaa atcgaacact 1440
283 gttatttcct ggaatccctg ttaacgtacg cgtggcggtat attacagtgg gaataactaa 1500
284 aagttagagg ttctgaatcct ccctaaccct gggtaggggc cca 1543
286 <210> SEQ ID NO: 24
287 <211> LENGTH: 55
288 <212> TYPE: DNA
289 <213> ORGANISM: rape mosaic virus
291 <400> SEQUENCE: 24
292 gatggcgccct taatacgact cactatagtt ttatttttgt tgcaacaaca acaac 55
294 <210> SEQ ID NO: 25
295 <211> LENGTH: 30
296 <212> TYPE: DNA
297 <213> ORGANISM: rape mosaic virus
299 <400> SEQUENCE: 25
300 cttgtgccct tcatgacgag ctatatcagc 30
302 <210> SEQ ID NO: 26
303 <211> LENGTH: 497
304 <212> TYPE: DNA
305 <213> ORGANISM: rape mosaic virus
307 <400> SEQUENCE: 26
308 ccttaatacg actcactata gttttatttt tgttgcaaca acaacaacaa attacaataa 60
309 caacaaaaca aatacaaaaca acaacaacat ggcacaattt caacaaacag taaacatgca 120
310 aacattgcag gctgcccgcag ggcgcaacag cctggtgaat gatttagcct cagcagctgt 180
311 ttatgacaat gctgtcgagg agctaaatgc acgctcgaga cgccctaagg ttcattactc 240
312 caaatcagtg tctacggaac atgacgctgt tagcttcaaa cgcttatccg gagtttgaga 300
313 tttcctttac tcatacccaa catgccgtac actcccttgc ggggtggccta aggactcttg 360
314 agtttagagta tctcatgatg caagttccgt tcggttctct gacgtacgac atcgggtggt 420
315 actttgcagc gcaccttttc aaaggacgag actacgttca ctgctgtatg ccaaacttgg 480
316 atgtacgtga tatagct
318 <210> SEQ ID NO: 27
319 <211> LENGTH: 55

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